



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/580,043	05/19/2006	Kazuhiko Okamatsu	09812.0082	7566
22852	7590	05/20/2009		
FINNEGAN, HENDERSON, FARABOW, GARRETT & DUNNER LLP 901 NEW YORK AVENUE, NW WASHINGTON, DC 20001-4413			EXAMINER LEE, NICHOLAS J	
			ART UNIT 2627	PAPER NUMBER
			MAIL DATE 05/20/2009	DELIVERY MODE PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

### Office Action Summary

**Application No.**

10/580,043

**Applicant(s)**

OKAMATSU, KAZUHIKO

**Examiner**

NICHOLAS LEE

**Art Unit**

2627

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 25 February 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-5 and 7-9 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-5 and 7-9 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-8508)  
Paper No(s)/Mail Date 1/2/2009
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

**DETAILED ACTION**

***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-2 and 4-5 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent No. 6,614,739 B1 to Sasaki et al ("Sasaki") in view of US Patent No. 5,859,824 to Izumi et al ("Izumi").

As to claim 1, Sasaki discloses an apparatus that comprises a controller for determining the disk type and manufacturer of the disk (col. 11, lines 10-15), a disc drive mode controller (host computer, Fig. 1, 80) determining whether the disc drive is operating in write mode or in read mode, a radio frequency signal detector (fig. 1, 5; col. 5, lines 1-18) for detecting in whether information is recorded on the optical disc based on the presence or absence of an RF signal in the reflected laser beam, and a processor (Fig. 1, 14) for generating a tracking error signal based on the detected intensity of the reflected laser beam (col. 5, lines 1-6, and lines 10-18). It is obvious that a detector is used to determine the presence or absence of a RF signal if its function is detect RF signals in a information medium.

Sasaki fails to disclose a disc drive comprising a memory storing error signal tracking coefficients, a tracking error signal coefficient controller configured to select from the memory a tracking error signal coefficient corresponding to the disc type.

Izumi discloses a digital disk player comprising a tracking error signal coefficient controller (Fig. 5, 124) for determining coefficients and a memory (Fig. 4, 124a) for storing error signal tracking coefficients (col. 6, lines 58-67). Izumi disclose a determination of the type of disk is simultaneously executed with determination of a servo gain coefficient made by the system controller (col. 5, lines 58-65). It would obvious that since disc type determination and the determination of coefficients made by the system controller are both based on the amplitude value that the two could be determined corresponding to each other such that the determinations would both correspond to an amplitude value.

At the time of the invention, it would have been obvious to one of ordinary skill in the art to have modified Sasaki with the teachings of Izumi to create a disc device more efficient in tracking error signals used in servo control operations. The two arts are both directed towards optical disc drives and the operation thereof using tracking error signals.

As to claim 2, the same rejection or discussion is used as in the rejection of claim 1.

As to claim 4, the same rejection or discussion is used as in the rejection of claim 1.

As to claim 5, the same rejection or discussion is used as in the rejection of claim 1.

3. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent No. 6,614,739 B1 to Sasaki et al ("Sasaki") in view of US Patent No. 5,859,824 to Izumi et al ("Izumi"), and further in view of US Patent Pub. 2002/0075780 A1 to Ogihara ("Ogihara")

As to claim 3, Sasaki fails to disclose information that discloses that type of disk as showing any of DVD-R, a DVD-RW, a DVD+RW, or a DVD+RW.

Ogihara discloses a disk drive that identifies the type of disk that could be any one of DVD-R, DVD-RW, and DVD+RW (Fig. 4a, 4b, ¶ 0004).

At the time of the invention, it would have been obvious to one of ordinary skill in the art to have modified Sasaki as modified with the teachings of Ogihara to allow the device a wider range of readable and recordable medium.

4. Claims 7-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent No. 6,614,739 B1 to Sasaki et al ("Sasaki") in view of US Patent No. 5,859,824 to Izumi et al ("Izumi"), and further in view of US Patent No. 4,886,688 to Ohtake et al ("Ohtake").

As to claims 7-9, see the discussion of Sasaki and Izumi above. Sasaki as modified fails to disclose a disc drive wherein the processor generates the tracking error signal based further on a difference between the intensity of the

reflected laser beam at first and second locations and on the tracking error signal coefficient multiplied by the difference.

Ohtake discloses an optical disc apparatus with track offset correction wherein the track deviation is detected on the basis of the unbalance or difference between the two reflected light quantities (col. 1, lines 45-68 – col. 2, lines 1-17).

At the time of the invention, it would have been obvious to one of ordinary skill in the art to have modified Ohtake as modified with the teachings of Izumi as the two arts are directed towards optical disc devices and a tracking operation executed therein.

As to claim 8, the same rejection or discussion is used as in the rejection of claim 4.

As to claim 9 the same rejection or discussion is used as in the rejection of claim 5.

### ***Response to Arguments***

5. Applicant's arguments, filed 2/25/2009, with respect to claims 1-2 and 4-5 have been considered but are moot in view of the new ground(s) of rejection. See the rejections above.

***Conclusion***

6. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to **NICHOLAS LEE** whose telephone number is (571)270-7354. The examiner can normally be reached on **Monday-Friday 7:30 AM - 5:00 PM**.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph Feild can be reached on 571-272-4090. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/NICHOLAS LEE/  
Examiner, Art Unit 2627

/Joseph H. Feild/  
Supervisory Patent Examiner, Art Unit 2627